PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Johns Manville International, Inc. 814 Richmond Avenue Richmond, Indiana 47374

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T177-7720-00006	
Original signed by Janet G. McCabe Issued by: Janet G. McCabe, Assistant Commissioner	Issuance Date: October 4, 2001
Office of Air Quality	Expiration Date: October 4, 2006

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary fiber glass insulation manufacturing plan.

Responsible Official: Emerson Bungard, Plant Manager

Source Address: 814 Richmond Ave., Richmond, Indiana 47374

Mailing Address: P.O. Box 428, Indiana 47375-0428

General Source Phone Number: (765) 973-5204

SIC Code: 3296 County Location: Wayne

Source Location Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD;

Major Source, Section 112 of the Clean Air Act

1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2, 3, and 6:
 - (1) One (1) rail car unloading station. The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car;
 - (2) Eight (8) raw material batch silos, installed in 1967. As raw materials are loaded into the batch silos, air within the silos is displaced to the atmosphere through vents at the top of each silo. These vents are equipped with fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28; and
 - (3) Three (3) day bins, installed in 1961 and 1986. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, and S33.
- (b) Melt Facilities:
 - (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;

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> (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and

(3)One (1) Line 6 electric melter, installed in 1974 and to be modified in 2001 or 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.

(c) Forming Facilities:

- (1) One (1) Line 2 forming chamber for unbonded product, installed in 1961, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2;
- (2) One (1) Line 3 forming chamber for unbonded product, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3.
- (3)One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.

Curing and Cooling Facilities: (d)

(1) One (1) Line 6 natural gas-fired curing oven and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.

(e) Shredding and Packaging Facilities:

(1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any Johns Manville International, Inc.

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particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S85 and S86:

- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S85 and S86;
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S12 and S13;
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate matter emissions in the cyclone airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S12 and S13.
- (5) One (1) Line 6 shredding process for unbonded and bonded product, installed in 1974. The shredded fiber is then pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to Stack S11; and
- (6) One (1) Line 6 packaging area for unbonded and bonded product, installed in 1974. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by a baghouse before being exhausted to Stack S11. The bonded product from Line 6 may also be trimmed and packaged. This operation generates negligible particulate matter emissions that are uncontrolled.

(f) Ancillary Equipment:

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- (1) One (1) EP dust recycling system, installed in 1987, modified in 2000, and exhausted to stack S34;
- (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to stack S10: and
- One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

Maximum capacities and throughputs not listed in the descriptions above have been included in an OAQ confidential file.

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A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the

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shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper

maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

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(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance:
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
 - (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Johns Manville International, Inc.

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Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act:
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC

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2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

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(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work

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or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC
 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements
 are applicable for any removal or disturbance of RACM greater than three (3) linear feet
 on pipes or three (3) square feet on any other facility components or a total of at least
 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61,
 Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Johns Manville International, Inc.

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no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter

should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

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(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures in December 1996.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.

 [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

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- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

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- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C -Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

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Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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The first report shall cover the period commencing on the date of issuance of this permit (e) and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

Compliance with 40 CFR 82 and 326 IAC 22-1 C.21

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- Persons opening appliances for maintenance, service, repair, or disposal must comply (a) with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Raw Material Handling, Storage, and Batching Equipment

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2, 3, and 6:
 - (1) One (1) rail car unloading station. The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car:
 - (2) Eight (8) raw material batch silos, installed in 1967. As raw materials are loaded into the batch silos, air within the silos is displaced to the atmosphere through vents at the top of each silo. These vents are equipped with fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28; and
 - (3) Three (3) day bins, installed in 1961 and 1986. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, and S33.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources), the allowable PM emission rate from the following listed equipment:

Railcar unloading station

S21 raw material storage silo

S22 raw material storage silo

S23 raw material storage silo

S24 raw material storage silo

S25 raw material storage silo

S26 raw material storage silo

S27 raw material storage silo

S28 raw material storage silo

S31 raw material day bin 2N

S32 raw material day bin 3W

S33 raw material day bin 3E

Shall each not exceed 0.03 grain per dry standard cubic foot (dscf).

D.1.2 Particulate Matter Limitations [326 IAC 2-2-3(a)(3)]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the raw material handling, storage and batching facilities stated above shall comply with the following limitations:

(a) The unloading station shall be equipped with a bootlift device and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in

15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A. Method 9:

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- (b) The raw material conveyor system shall be enclosed and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
- (c) The raw material batch silos and day bins shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.3 Visible Emissions Notations

- (a) Visible emission notations of the railcar unloading station, raw material batch silos, and day bins stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2 and D.1.3, the Permittee shall maintain records of visible emission notations of the mentioned stack exhaust once per shift.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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Facility Description [326 IAC 2-7-5(15)]:

Melt Furnaces

SECTION D.2

- (b) Melt Facilities:
 - (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
 - (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and
 - (3) One (1) Line 6 electric melter, installed in 1974 and to be modified in 2001 and 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Particulate Matter (PM) Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14][326 IAC 12(40 CFR 60.293, Subpart CC)]
 - (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), each furnace shall comply with the following limitations:

	Pollutant Emission Limitations, lb/ton of glass pulled		
Facility	PM/PM ₁₀	VOC	СО
Line 2 Melt Furnace	0.25	0.38	0.85
Line 3 Melt Furnace	0.25	0.38	0.85
Line 6 Melter	0.45	0.38	0.85

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible fractions.

(b) Pursuant to CP-177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (PSD Rules) and 326 IAC 6-1-14, the particulate matter (PM) emissions from each furnace shall comply with the following limitations:

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	PM/PM ₁₀ Emission Limitations	
Facility	tons/yr	gr/dscf
Line 2 Melt Furnace	7.0	0.01
Line 3 Melt Furnace	7.8	0.01
Line 6 Melter	3.9	0.02

- (c) Pursuant to 40 CFR 60.292, Subpart CC (Standards of Performance for Glass Manufacturing Plants), the particulate matter from the Line 2 and Line 3 melt furnaces shall not exceed 0.25 grams per kilogram (0.5 pounds per ton) of glass produced. Compliance with the limits in Condition D.2.1(a) will ensure compliance with this limit.
- (d) To ensure compliance with Condition D.2.1(a), the lines 2 and 3 melt furnaces shall only use natural gas.

D.2.2 Sulfur Dioxide and Nitrogen Oxides [326 IAC 2-2]

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Pursuant to CP-177-5873-00006, issued April 22, 1999, each furnace shall comply with the following limitations for NOx and SO2 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

	Pollutant Emission Limitations, lbs/hr		
Facility	NO _x	SO2	
Line 2 Melt Furnace	3.41	0.20	
Line 3 Melt Furnace	3.41	0.20	
Line 6 Melter	0.08	0.11	

D.2.3 Operation Standards [326 IAC 2-2-3(a)(3)]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the furnaces shall comply with the following limitations:

- (a) Line 2 Melt Furnace shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year);
- (b) Line 3 Melt Furnace shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year); and
- (c) Line 6 Melter shall not exceed a glass production rate of 4,000 pounds per hour (equivalent to 17,520 tons per year).

D.2.4 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.5 Particulate Matter (PM)

- (a) In order to comply with D.2.1, the electrostatic precipitator for PM control shall be in operation and control emissions from the Line 2 and Line 3 natural gas-fired melt furnaces at all times when either furnace is in operation.
- (b) In order to comply with D.2.1, the fabric filter for PM control shall be in operation at all times when the line 6 electric melter is in operation.

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D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11][326 IAC 12 (40 CFR 60.296, Subpart CC)]

Pursuant to CP 177-5873-00006, issued April 22, 1999 and 40 CFR 60.296, Subpart CC, the following compliance stack tests shall be performed for the following facilities within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up:

Stack	Process	PM/PM ₁₀ ¹	NOx ²
S5	Line 2	0.25 lb/ton 0.01 gr/dscf	3.41 lbs/hr
S5	Line 3	0.25 lb/ton 0.01 gr/dscf	3.41 lbs/hr
S7	Line 6	0.45 lb/ton 0.020 gr/dscf	No Testing Required

¹ PM/PM10 means that the PM limit and the PM₁₀ limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM₁₀ shall be measured in accordance with 40 CFR 51, Appendix M, Method 201 A and 202, or other methods as approved by the Commissioner. For the Lines 2 and 3 furnaces the emission rate shall be determined as specified in 40 CFR 60.296(d).

Compliance Monitoring Requirements

D.2.7 Electrostatic Precipitator (ESP) Operation Condition

- (a) The Permittee shall maintain the field voltages of the ESP at a minimum level of 20 kilovolts or a minimum level determined from a compliant stack test. At least once per shift the Permittee shall monitor and record the primary voltage and amperage of the T-R sets and the voltages and amperages of the three (3) fields. The Compliance Response Plan for the ESP shall contain troubleshooting contingency and response steps for the ESP when the voltage of the T-R set drops five (5) direct current kilovolts below the predetermined baseline or if less than 90% of the total T-R sets are functioning.
- (b) The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) An inspection of the ESP shall be performed each calendar quarter. A record shall be kept of the results of the inspection and the number of ESP part(s) replaced.
- (d) In the event that an ESP failure has been observed:
 - (1) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;
 - (2) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility; and
 - (3) Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.

The MMBtu per hour ratings of each combustion unit to be tested (Lines 2 and 3 Melt Furnaces and Lines 2, 3, and 6 Manufacturing Processes) shall be included in the test protocol.

D.2.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the fabric filters used in conjunction with the processes, at least once per shift when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the fabric filter shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response Steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.9 Fabric Filter Inspections

An inspection shall be performed each calender quarter of all fabric filters controlling the furnaces when venting to the atmosphere. A fabric filters inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective filters shall be replaced.

D.2.10 Broken or Failed Filter Detection

In the event that filter failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment fabric filters, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.2.11 Visible Emission Notations

- (a) Visible emission notations of the ESP and the fabric filter stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80% of the time the process is in operation, not counting start up or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.

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(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal and abnormal visible emissions for that specific process.

(e) The Compliance Response Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements

D.2.12 Record Keeping Requirement

- (a) To document compliance with Condition D.2.11, the Permittee shall maintain records of visible emission notations of the ESP and fabric filter stack exhaust once per shift.
- (b) To document compliance with Condition D.2.8, the Permittee shall maintain the following:
 - Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with D.2.7, the Permittee shall maintain records of the following:
 - (1) Field voltages of the ESP.
 - (2) Primary voltage and amperage of the T-R sets.
 - (3) Voltages and amperages for the three (3) fields.
 - (4) Results from the semi-annual calibration of the instrument used for determining the T-R set voltage.
 - (5) Results from the quarterly inspection of the ESP.
- (d) To document compliance with D.2.9, the Permittee shall maintain records of the results of the inspections required under Condition D.2.9.
- (e) To document compliance with D.2.1(b) and D.2.3, the Permittee shall maintain records of the monthly production rate for each line.
- (f) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.2.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(b) and D.2.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the

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Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)]:

Manufacturing Lines - Forming, Curing, and Cooling

- (c) Forming Facilities:
 - (1) One (1) Line 2 forming chamber for unbonded product, installed in 1961, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2;
 - (2) One (1) Line 3 forming chamber for unbonded product, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3.
 - (3) One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.
- (d) Curing and Cooling Facilities:
 - (1) One (1) Line 6 natural gas-fired curing oven and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), each manufacturing line shall comply with the following limitations:
 - (1) Unbonded Product Limitations

	Pollutant Limitations			
Facility	PM/PM ₁₀ (lb/ton VOC CO glass pulled) (lbs/hr) (lbs/hr)			
Line 2 Forming Process	3.70	6.78	21.0	
Line 3 Forming Process	3.70	6.78	21.0	
Line 6 Forming Process	3.70	3.77	25.3	

(2) Bonded Product Limitations

	Pollutant Limitations		
Facility	PM/PM ₁₀ (lb/ton VOC CO glass pulled) (lbs/hr) (lbs/hr)		
Line 6 Cooling Process	0.29	0.40	0.39
Line 6 Forming Process	7.84	8.66	25.3
Line 6 Curing Process	1.99	1.50	1.22

PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same and shall be measured as the sum of the filterable and condensible fractions. The particulate matter emissions established above demonstrate compliance with 40 CFR 60, Subpart PPP (New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants).

(b) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 6-1-14, the particulate matter (PM) emissions from each manufacturing line shall comply with the following limitations:

	PM Emission Limitations		
Facility	tons/yr	gr/dscf	
Line 2 Forming Process	58.3	0.02	
Line 3 Forming Process	123.6	0.02	
Line 3 Curing Process	27.4	0.02	
Line 6 Forming Process	45.4	0.02	
Line 6 Curing Process	6.2	0.02	

(c) Pursuant to CP-177-5873-00006, issued April 22, 1999, each manufacturing line shall comply with the following limitations for NO_x and SO₂ in order to render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

	Pollutant Emission Limitations, lbs/hr		
Facility	NO _x	SO ₂	
Line 2 Forming Process	2.03		
Line 3 Forming Process	2.03		
Line 6 Cooling Process	0.25		
Line 6 Forming Process	2.18		

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	Pollutant Emission Limitations, lbs/hr			
Facility	NO _x SO ₂			
Line 6 Curing Process	0.84			

(d) The hazardous air pollutant emissions from manufacturing lines 2, 3, and 6 shall be limited to less than a total of twenty-five (25) tons per year and less than ten (10) tons per year of any single HAP. This will render 326 IAC 2-4.1 (New Source Toxics Control Rule) and 40 CFR 63, Subpart NNN not applicable.

D.3.2 Operation Standards

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 2 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour;
- (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 3 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour; and
- (c) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 6 Forming, Curing and Cooling Process shall not exceed a glass production rate of 4,000 pounds per hour.
- (d) The production of product from each line shall be limited as follows to demonstrate compliance with the annual PM emission limitations required by Operation Condition D.3.1(b):

Facility	Combined Bonded and Unbonded Glass Production Limitation, tons/yr
Line 2 Forming Process	31,536
Line 3 Forming Process	31,536
Line 6 Forming Process	17,520

(e) The production of bonded product from Line 6 shall be limited to 6,240 tons of glass per year, rolled on a monthly basis, to demonstrate compliance with the PM, VOC, and HAP emission limitations required by Operation Condition D.3.1(a) and (d).

D.3.3 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.4 Control Device Operating Conditions

- (a) In order to comply with Condition D.3.1, the high efficiency air filters (HEAF) associated with the Line 6 curing and cooling process shall be operated at all times when its associated process is in operation.
- (b) In order to comply with D.3.1, the water spray systems associated with the forming sections of the manufacturing lines shall be operated at all times when the forming sections are in operation.

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D.3.5 Testing Requirements (326 IAC 2-7-69(1), (6)] [326 IAC 2-1.1-11]

Pursuant to CP 177-5873-00006, issued April 22, 1999, the following compliance stack tests shall be performed within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. Line 6 shall be performed for both bonded and unbonded products:

Stack	Process	PM/PM ₁₀ ¹	NO _x ²	VOC	СО	HAP ³
S2	Line 2 Forming - Unbonded	3.70 lb/ton 0.02 gr/dscf	2.03 lbs/hr	6.78 lb/hr	21.0 lb/hr	
S2	Line 6 Forming - Unbonded	3.70 lb/ton 0.02 gr/dscf	2.18 lbs/hr	3.77 lb/hr	25.3 lb/hr	
S2	Line 6 Forming/Curing/ Cooling - Bonded	10.1 lb/ton 0.02 gr/dscf	3.27 lbs/hr	10.6 lb/hr	26.9 lb/hr	2.28 lb/hr single HAP; 5.71 lb/hr combined HAP
S3	Line 3 Forming - Unbonded	3.70 lb/ton 0.02 gr/dscf	2.03 lbs/hr	6.78 lb/hr	21.0 lb/hr	

¹ PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM₁₀ shall be measured in accordance with 40 CFR 51, Appendix M, Methods 201A and 202, or other methods as approved by the Commissioner.

Compliance Monitoring Requirements

D.3.6 Visible Emission Notations

- (a) Visible emission notations of stacks S2 and S3 exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80% of the time the process is in operation, not counting start up or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal and abnormal visible emissions for that specific process.
- (e) The Compliance Response Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response

² The MMBtu per hour ratings of each combustion unit to be tested (Lines 2 and 3 Melting Furnaces and Lines 2, 3, and 6 Manufacturing Processess) shall be included in the test protocol.

³ HAP Compliance Tests shall consist of formaldehyde and phenol. The compliance tests shall be performed during the production of bonded product for line 6. Single HAP emissions from line 6 shall not exceed a total of 10 tons per year for a single HAP and 25 tons per year for combined HAPs to demonstrate compliance with Operation Condition No. D.3.1(d).

steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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D.3.7 High Efficiency Air Filter (HEAF) Operating Condition

- (a) The Permittee shall monitor and record the total static pressure drop across the HEAF, at least once per shift. The pressure drop across the HEAF shall be maintained within a pressure drop range of 1.0 and 7.0 inches of water. The pressure drop range may be adjusted to incorporate the pressure drop determined by a compliant stack test. If the water pressure falls outside of the determined range, corrective action shall be taken in accordance with the Permittee's Preventive Maintenance Plan. The company shall document the cause of the out-of-range reading and take immediate action to correct any problem. Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.
- (b) The instrument used for determining the pressure shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.
- (c) An inspection of the HEAF shall be performed each calendar quarter. Defective media shall be replaced. A record shall be kept of the results of the inspection and the media replaced.
- (d) In the event that a media failure has been observed and emissions temporarily exceed the standards:
 - (1) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;
 - (2) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility; and
 - (3) Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.

Record Keeping and Reporting Requirements

D.3.8 Record Keeping Requirement

- (a) To document compliance with Condition D.3.6, the permittee shall maintain records of visual emission notations of manufacturing lines stack exhaust once per shift.
- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of the following:
 - Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
 - (3) Results from the semi-annual calibration of the instrument used for determining the pressure of the HEAF.

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(4) Results from the quarterly inspection of the HEAF.

- (c) To document compliance with Conditions D.3.1 and D.3.2, the Permittee shall maintain records of the monthly production rate from each line.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.3.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.1 and D.3.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)]:

Shredding and Packaging Areas

- (e) Shredding and Packaging Facilities:
 - (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S85 and S86;
 - (2) One (1) Line 2 packaging area for unbonded product, installed in 1994. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S85 and S86;
 - (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S12 and S13;
 - (4) One (1) Line 3 packaging area for unbonded product, installed in 1993. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate matter emissions in the cyclone airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S12 and S13.
 - (5) One (1) Line 6 shredding process for unbonded and bonded product, installed in 1974. The shredded fiber is then pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to Stack S11; and
 - (6) One (1) Line 6 packaging area for unbonded and bonded product, installed in 1974. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by a baghouse before being exhausted to Stack S11. The bonded product from Line 6 may also be trimmed and packaged. This operation generates negligible particulate matter emissions that are uncontrolled.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.4.1 Particulate Matter Emission Limitations

Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), each shredding and packaging area shall comply with the following limitations:

Facility	Facility Stack	PM/PM10 Emission Limitations, lb/ton glass pulled
Line 2 Shredding and Packaging	S85	0.26
Line 2 Shredding and Packaging	S86	0.26
Line 3 Shredding and Packaging	S12	0.29
Line 3 Shredding and Packaging	S13	0.57
Line 6 Shredding and Packaging	S11	0.65

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible fractions.

D.4.2 Particulate Matter

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources), the allowable PM emission rates for each of the shredding and packaging facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

D.4.3 Operation Standards

Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the shredding and packaging processes shall comply with the following limitations:

- (a) Line 2 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year); and
- (b) Line 3 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year); and
- (c) Line 6 Shredding and Packaging Process shall not exceed a glass production rate of 4,000 pounds per hour (equivalent to 17,520 tons per year).

D.4.4 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.4.5 Particulate Matter

In order to comply with Condition D.4.1 and D.4.2, the baghouses for PM control shall be in operation at all times the associated shredding and packaging facilities are in operation.

D.4.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Pursuant to CP 177-5873-00006, issued April 2, 1999, the following compliance stack tests shall be performed within 60 days after achieving maximum production rate, but not later than 180 days after initial start-up:

Stack	Process	PM/PM ₁₀ ¹ (lb/ton glass pulled)
S11	Line 6	0.65 lb/ton
S12	Line 3	0.29 lb/ton
S13	Line 3	0.57 lb/ton

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Stack	Process	PM/PM ₁₀ ¹ (lb/ton glass pulled)
S85	Line 2	0.26 lb/ton
S86	Line 2	0.26 lb/ton

¹ PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM₁₀ shall be measured in accordance with 40 CFR 51, Appendix M, Methods 201A and 202, or other methods as approved by the Commissioner.

Compliance Monitoring Requirements

D.4.7 Visible Emission Notations

- (a) Visible emission notations of the shredding and packaging area baghouse systems stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, 80% of the time the process is in operation, not counting start up or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal and abnormal visible emissions for that specific process.
- (e) The Compliance Response Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.

D.4.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the processes, at least once per shift when the processes is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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D.4.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the shredding and packaging areas when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.4.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements

D.4.11 Record Keeping Requirement

- (a) To document compliance with Condition D.4.7, the Permittee shall maintain records of visible emission notations of the shredding and packaging area baghouses stack exhaust once per shift.
- (b) To document compliance with Condition D.4.8, the Permittee shall maintain the following:
 - (1) Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.9, the Permittee shall maintain records of the results of the inspections required under Condition D.4.9 and the dates the vents are redirected.
- (d) To document compliance with Conditions D.4.1 and D.4.3, the Permittee shall maintain records of the monthly production rates from each line.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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D.4.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Ancillary Equipment

- (f) Ancillary Equipment:
 - (1) One (1) EP dust recycling system, installed in 1987, modified in 2000, and exhausted to stack S34:
 - (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to stack S10; and
 - One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.5.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]

- (a) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration Rules), the ancillary equipment shall comply with the following particulate matter limitations:
 - (1) the particulate emissions from stack S34 from the EP recycling system shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
 - (2) the cold end housekeeping system shall be equipped with a baghouse system and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
 - the natural gas-fired boiler shall not exceed 0.34 pounds per hour and 0.0137 pounds per million Btu. The boiler shall also be limited to 1.5 tons per year to demonstrate compliance with the requirements of 326 IAC 6-1-14.
- (b) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the ancillary equipment shall comply with the following limitations:

	Pollutant Limitations, lbs/hr		
Facility	PM/PM ₁₀	voc	со
EP Dust Recycling System	0.19	0	0
Cold End Housekeeping System	0.51	0	0
Natural Gas-fired Boiler	0.34	0.07	0.875

Johns Manville International, Inc. Page 49 of 60 Richmond, Indiana OP No. T177-7720-00006

Permit Reviewer: ERG/KC

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible factions.

(c) Pursuant to CP 177-5873-00006, issued April 22, 1999, the ancillary equipment shall comply with the following limitations for NOx and SO2 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

	Pollutant Limitations, lbs/hr		
Facility	NO _x SO2		
EP Dust Recycling System	0	0	
Cold End Housekeeping System	0	0	
Natural Gas-fired Boiler	3.5	0.015	

(d) Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources) the allowable PM emission rates for each of the ancillary equipment facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

D.5.2 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.5.3 Particulate Matter

In order to comply with D.5.1(a), (b) and (d), the baghouse for PM control shall be in operation at all times the cold end housekeeping system is in operation.

Compliance Monitoring Requirements

D.5.4 Visible Emissions Notations

- (a) Visible emission notations of the dust recycling fan, and cold end housekeeping system stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the processes, at least once per shift when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response Steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

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The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the cold end housekeeping system when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.5.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements:

D.5.8 Record Keeping Requirement

- (a) To document compliance with Condition D.5.1(a), (b), and (d) and D.5.4, the Permittee shall maintain records of visible emission notations of the dust recycling fan and cold end housekeeping system stack exhaust once per shift.
- (b) To document compliance with Condition D.5.5, the Permittee shall maintain the following:
 - Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:

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- (A) Inlet and outlet differential static pressure; and
- (B) Cleaning cycle operation.
- (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the inspections required under Condition D.5.6 and the dates the vents are redirected.
- (d) The Permittee shall maintain records of monthly fuel usage to document compliance with the annual PM emission limitation required by Operation Condition D.5.1(a)(3); and
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit.

D.5.9 Reporting Requirements

The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each quarter. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each quarter.

SECTION D.6

FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)]:

Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.6.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources), the PM emissions from the trimmers with dust collector, shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

D.6.2 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaner operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.6.3 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or

Johns Manville International, Inc. Richmond, Indiana

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> (C) The solvent is heated.

- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3)Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- Equip the degreaser with one (1) of the following control devices if the solvent (5) volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and ninetenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - A water cover when solvent is used is insoluble in, and heavier than, (B) water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the (b) owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3)Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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OP No. T177-7720-00006

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Johns Manville International, Inc.

Source Address: 814 Richmond Avenue, Richmond, Indiana 47374 Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428

Part 70 Permit No.: T177-7720-00006

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Johns Manville International, Inc.

Source Address: 814 Richmond Avenue, Richmond, Indiana 47374 Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428

Part 70 Permit No.: T177-7720-00006

This f	orm o	consists	of 2	pages
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OP No. T177-7720-00006

9	This is an emergency as	defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
O and the Later of the second
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Describe:	Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities imminent injury to persons, severe damage to equipment, substantial loss loss of product or raw materials of substantial economic value:	
Form Completed by:	
• •	
Title / Position:	
Date:	 ,
Phone:	

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

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OP No. T177-7720-00006

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

PART 70 OPERATING PERMIT SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Johns Manville International, Inc.

Source Address: 814 Richmond Avenue, Richmond, Indiana 47374 Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428

Part 70 Permit No.: T177-7720-00006

9	Natural Gas Only Alternate Fuel burned	
	From:	To:
inforr	nation in the document ar	nation and belief formed after reasonable inquiry, the statements and e true, accurate, and complete.
Signa	ature:	
Printe	ed Name:	
Title/	Position:	
Phon	ne:	
Date:	:	

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Johns Manville International, Inc.

814 Richmond Avenue, Richmond, Indiana 47374 Source Address: Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428

Part 70 Permit No.: T177-7720-00006

Months:	to	 Year:	

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	Page 1 of 2
This report is an affirmation that the source has mereport shall be submitted quarterly based on a caler the date(s) of each deviation, the probable cause of be reported. Deviations that are required to be reported according to the schedule stated in the appropriate included in this report. Additional pages may be attorned please specify in the box marked "No deviations occasions."	ndar year. Any deviation from the requirements, if the deviation, and the response steps taken must britted by an applicable requirement shall be olicable requirement and do not need to be ached if necessary. If no deviations occurred,
9 NO DEVIATIONS OCCURRED THIS REPORTIN	IG PERIOD.
9 THE FOLLOWING DEVIATIONS OCCURRED T	HIS REPORTING PERIOD
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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	: age 2 81 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

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OP No. T177-7720-00006

COMPLIANCE DATA SECTION

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

PART 70 QUARTERLY REPORT

Source Name: Johns Manville International, Inc.

Source Address: 814 Richmond Avenue, Richmond, Indiana 47374 Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428

Part 70 Permit No.: T 177-7720-00006

Lines 2, 3, and 6 Production Processes Facility:

Facility:
Parameter: **Production Rate**

Limits: Production Limits Required by Operation Conditions D.2.3, D.3.2, and D.4.3.

YEAR: _____

Month	Production Facility	Production this Month, tons	Production Last 12 Months, tons	Production Limit, tons/12 consecutive months
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	Line 6 Bonded and Unbonded			17,520
	Line 6 Bonded ¹			6,240
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	Line 6 Bonded and Unbonded			17,520
	Line 6 Bonded ¹			6,240
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	Line 6 Bonded and Unbonded			17,520
	Line 6 Bonded ¹			6,240

The production of bonded product from Line 6 shall be limited to 6,240 tons per 12 consecutive months.

9 9	Deviation/s or	occurred in this quarter. curred in this quarter. been reported on:	
Tit	ibmitted by: le / Position: gnature:		
Da	griature. ate: none:		

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Background and Description

Source Name: Johns Manville International, Inc.

Source Location: 814 Richmond Avenue, Richmond, Indiana 47374

County: Wayne SIC Code: 3296

Operation Permit No.: T177-7720-00006

Permit Reviewer: ERG/MT

On July 20, 2001, the Office of Air Quality (OAQ) had a notice published in the Palladium Item, Richmond, Indiana, stating that Johns Manville International, Inc. had applied for a operating permit to operate a fiberglass insulation manufacturing plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, IDEM, OAQ, made the following corrections to this permit (bolded language has been added, the language with a line through it has been deleted).

- 1. B.8 Compliance with Permit Conditions has been revised to clarify that noncompliance with any requirement of this permit may result in an enforcement action against the permittee, an action to modify, revoke, reissue or terminate the source's permit, and/or a denial of the permittee's application to renew the permit. In addition, except for those permit conditions that are not federally enforceable, noncompliance is also a violation of the federal Clean Air Act.
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
 - (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
 - (b) Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
 - (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

- 2. The TSD suggests that there is no enforcement action pending. This suggestion is incorrect. The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after public notice are documented in the Addendum to the Technical Support Document. Please note that IDEM is aware that on 9/29/00, stack testing of furnaces No. 2 and 3, exhausting through the common stack No. 5, found that the source was in violation of PM/PM10 and NO_x limits in its current permit, CP177-5873-00006. IDEM is aware of this and will take appropriate action.
- 3. To avoid reference to Wayne County as nonattainment for particulates, which is no longer the case, the rule citation at the beginning of Conditions D.2.1(b) and D.3.1(b) will be edited to delete the reference to the rule's title. However, the limits remain the same. Both conditions will be changed as follows:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Particulate Matter (PM) Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14][326 IAC 12(40 CFR 60.293, Subpart CC)]
 - (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (PSD Rules) and 326 IAC 6-1-14 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from each furnace shall comply with the following limitations:

Emission Limitations and Standards

- D.3.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]
 - (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 6-1-14 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from each manufacturing line shall comply with the following limitations:
- 4. To specifically identify the production basis, the production rate limitation in Condition D.3.2(e) will be revised as follows:

D.3.2 Operation Standards

- (e) The production of bonded product from Line 6 shall be limited to 6,240 tons **of glass** per year, rolled on a monthly basis, to demonstrate compliance with the PM, VOC, and HAP emission limitations required by Operation Condition D.3.1(a) and (d).
- 5. To be consistent with the construction permit, the following change was made:
 - D.3.2 Operation Standards
 - (c) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 6 Forming, Curing and Cooling Process shall not exceed a combined glass production rate of bonded and unbonded product of 4,000 pounds per hour.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Johns Manville International, Inc.

Source Location: 814 Richmond Avenue, Richmond, Indiana 47374

County: Wayne SIC Code: 3296

Operation Permit No.: T177-7720-00006

Permit Reviewer: ERG/MT

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Johns Manville International, Inc. relating to the operation of a fiberglass insulation manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2, 3, and 6:
 - (1) One (1) rail car unloading station. The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car;
 - (2) Eight (8) raw material batch silos, installed in 1967. As raw materials are loaded into the batch silos, air within the silos is displaced to the atmosphere through vents at the top of each silo. These vents are equipped with fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28; and
 - (3) Three (3) day bins, installed in 1961 and 1986. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, and S33.

(b) Melt Facilities:

- (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
- (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and

(3) One (1) Line 6 electric melter, installed in 1974 and to be modified in 2001 or 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.

(c) Forming Facilities:

- (1) One (1) Line 2 forming chamber for unbonded product, installed in 1961, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2;
- (2) One (1) Line 3 forming chamber for unbonded product, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3.
- (3) One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.

(d) Curing and Cooling Facilities:

(1) One (1) Line 6 natural gas-fired curing oven and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.

(e) Shredding and Packaging Facilities:

- (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S85 and S86;
- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone

- airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S85 and S86:
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S12 and S13:
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate matter emissions in the cyclone airstream are controlled by two (2) baghouses before the airstream is exhausted to Stacks S12 and S13.
- (5) One (1) Line 6 shredding process for unbonded and bonded product, installed in 1974. The shredded fiber is then pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to Stack S11; and
- (6) One (1) Line 6 packaging area for unbonded and bonded product, installed in 1974. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by a baghouse before being exhausted to Stack S11. The bonded product from Line 6 may also be trimmed and packaged. This operation generates negligible particulate matter emissions that are uncontrolled.

(f) Ancillary Equipment:

- (1) One (1) EP dust recycling system, installed in 1987, modified in 2000, and exhausted to stack S34:
- (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to stack S10; and
- One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new emission units and pollution control equipment receiving advanced source modification approval during this renewal review process.

Emission Units that have been permitted, but have been removed or never installed:

(a) Line 2 curing oven;

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- (b) Line 3 curing oven;
- (c) Standby generator, 635 hp; and
- (d) Standby generator, 700 hp.

Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (c) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenth (0.5) percent sulfur by weight.
- (d) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (e) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (f) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (g) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (h) Refractory storage not requiring air pollution control equipment.
- (i) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (j) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (k) Cleaners and solvents characterized as follows: (1) having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100EF) or; (2) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (I) Closed loop heating and cooling systems.
- (m) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (n) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (o) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility.

- (p) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (q) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (r) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (s) Process vessel degassing and cleaning to prepare for internal repairs.
- (t) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- (u) Paved and unpaved roads and parking lots with public access.
- (v) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (w) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (x) Four (4) standby diesel generators, three (3) rated at 155 hp each, and one (1) rated as 174 hp, exhausting to stacks S148, S149, S150, and S161, respectively. A 63.2 hp diesel engine that powers the emergency five pump exhausts to stack S160.
- (y) Stationary fire pumps.
- (z) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (aa) Activities with emissions equal to or less than thresholds (PM 5 tpy, PM₁₀, 5 tpy, SO₂ 10 tpy or 25 lb/day, NO_x 10 tpy, CO 25 tpy or 25 lb/day, Pb 0.2 tpy or 3.29 lb/day, single HAP 1 tpy, combination of HAPs 2.5 tpy, VOC 10 tpy, VOC for source with a control device to comply with a provision of 326 IAC 8 5 tpy)
 - (1) Binder Tank (EPN S45)
 - (2) Maintenance Welding Ventilation
 - (3) Propane Expander (EPN S68)
 - (4) Propane Vaporizer (EPN S75)
 - (5) Stand by Generators
 - (6) Ammonia Storage Tank (EPN S51)
 - (7) Dedusting Storage Tank
 - (8) Urea Storage Tank
 - (9) Used Oil Storage Tank
 - (10) Emulsion Storage Tank
 - (11) 300 gal Gasoline Storage Tank (T-001)
 - (12) 300 gal Diesel Storage Tank (T-002)
 - (13) 300 gal Diesel Storage Tank (T-003)
 - (14) 300 gal Kerosene Storage Tank (T-004)

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) A-177-12976-00006, issued February 13, 2001
- (b) A-177-11122-00006 issued July 6, 1999
- (c) CP-177-5873-00006 issued April 22, 1999 (this PSD permit supercedes all previous permits)
- (d) CP-177-3394-00006 issued April 11, 1994
- (e) CP-177-3204-00006 issued October 8, 1993
- (f) OP-89-02-88-0167 issued April 2, 1984
- (g) OP-89-02-88-0166 issued April 2, 1984
- (h) OP-89-02-88-0165 issued April 2, 1984
- (i) OP-89-02-88-0164 issued April 2, 1984
- (j) OP-89-11-83-0139 issued July 16, 1980
- (k) OP-89-11-83-0138 issued July 16, 1980
- (I) OP-89-11-83-0137 issued July 16, 1980
- (m) OP-89-11-83-0136 issued July 16, 1980
- (n) OP-89-11-83-0135 issued July 16, 1980
- (o) OP-89-12-81-0123 issued May 11, 1978
- (p) OP-89-12-81-0106 issued December 9, 1977

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

CP 177-5873-00006 issued on April 22, 1999

- I. Condition D.3.1(a)(2):
 - (2) Bonded Product Limitations

	Pollutant Limitations			
Facility	PM/PM ₁₀ (lb/ton glass pulled)	VOC (lbs/hr)	CO (lbs/hr)	
Line 3 Forming Process	2.19	18.6	21.0	
Line 3 Curing Process	0.56	4.25	1.22	
Line 3 Cooling Process	0.29	0.72	0.70	
Line 6 Forming Process	7.84	8.66	25.3	
Line 6 Curing Process	1.99	1.50	1.22	

PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same and shall be measured as the sum of the filterable and condensible fractions. The particulate matter emissions established above demonstrate compliance with 40 CFR 60, Subpart PPP (New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants).

Reason not incorporated: The pollutant limitations for Line 3 were not included in this permit because bonded product is no longer made on Line 3.

- II. Condition D.3.1 (b):
- (b) Pursuant to 326 IAC 6-1-14 (Nonattainment Area Particulate Limitations), the particulate matter (PM) emissions from each manufacturing line shall comply with the following limitations:

	PM Emission Limitations				
Facility	tons/yr	gr/dscf			
Line 2 Forming Process	31.2	0.02			
Line 2 Curing Process	0				
Line 3 Forming Process	58.5	0.02			
Line 3 Curing Process	19.5	0.02			
Line 6 Forming Process	15.6	0.02			
Line 6 Curing Process	4.0	0.02			

Reason not incorporated: The PM limitations for Lines 2 and 3 curing process were not incorporated in this permit because bonded product is no longer made on Lines 2 and 3. The Line 2 curing process no longer exists and the curing process on Line 3 is not functional. Also the emission limitations for the other facilities have changed because the SIP PM emission limitations have changed since this permit (177-5873-00006) was issued.

- III. Condition D.3.1(c):
- (c) The particulate matter emissions established in (a) and (b) above shall supersede the following Operation Permit Conditions

Facility	Operation Permit Condition
Line 2 Forming/Curing Process	Condition 5 of Operation Permit No. 89-02-88-0166
Line 3 Forming/Curing Process	Condition 5 of Operation Permit No. 89-02-88-0167, issued on April 2, 1984

Reason not incorporated: This permit condition explains that the requirements of CP 177-5873-00006 supercede the requirements of a previous permit. This explanation is not needed in the Part 70 permit.

- IV. Condition D.3.1(d):
- (d) In order to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration), each manufacturing line shall comply with the following limitations:

	Pollutant Emission Limitations, lbs/hr					
Facility	NO _x	SO2				
Line 2 Forming Process	2.03	0				
Line 3 Forming Process	2.03	0				
Line 3 Curing Process	1.51	0				
Line 3 Cooling Process	0.46	0				
Line 6 Forming Process	2.18	0				
Line 6 Curing Process	0.84	0				

Reason not incorporated: The pollutant emission limitations for the Line 3 curing process were not incorporated in this permit because bonded product is no longer made on Line 3. The Line 3 curing process is not functional. The Line 3 cooling process was moved to Line 6 and the pollutant emission limitations were changed for the Line 6 cooling process under A-177-11122-00006. Also the SO_2 limit was changed from zero to "--". This is to clarify that there is no limit for SO_2 rather than there being a limit equal to zero. After reviewing this construction permit (177-5873-00006) it was determined that emissions of SO_2 from the source had not triggered PSD review, nor was a limit taken in order to not trigger PSD review. Therefore an SO_2 limit was not necessary.

V. Condition D.3.1(e):

(e) In order to avoid the requirements of 326 IAC 2-1-3.4 (New Source Toxics Control Rule), the hazardous air pollutant (HAP) emissions from manufacturing lines 2, 3, and 6 shall be less than 10 tons of a single HAP per year and less than 25 tons of combined HAPs per year.

Reason not incorporated: The HAP limit, which applied to each line separately in order for all three lines to avoid the New Source Toxics Control Rule, was replaced with a HAP limit that applies to the whole source. Emissions of HAP from the source can not exceed 10 tons of a single HAP per year or 25 tons of a combination of HAPs per year. This limit renders the NESHAP 40 CFR 63, Subpart NNN not applicable.

VI. Condition D.3.3:

D.3.3 BACT Requirement

Pursuant to 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the Line 2 curing oven shall be permanently removed from service upon construction and operation of this permit modification.

Reason not incorporated: This condition was not specifically included in this permit. However the Line 2 curing oven is not included in the facility description and therefore is not a permitted piece of equipment.

VII. Condition D.3.6:

D.3.6 High Efficiency Air Filter (HEAF) Operating Condition The HEAFs associated with the Line 3 curing process and the Line 6 curing and cooling process shall be operated at all times when its associated process is in operation.

Reason not incorporated: This condition was not incorporated in to this permit for Line 3 because Line 3 no longer has an operable curing process.

VIII. Condition D.3.8:

D.3.8 Venturi Scrubber Operating Condition

The scrubber shall be constructed and operated prior to the manufacture of bonded product on Line 3. The scrubber shall be operated at all times when Line 3 is in operation for the production of bonded product.

Reason not incorporated: Bonded product is no longer made on Line 3, therefore this condition no longer applies.

IX. Conditions D.6.1 and D.6.2:

D.6.1 Pollutant Emission Limitations

Pursuant to 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), each manufacturing line shall comply with the following limitations:

	Pollutant Emission Limitations							
Facility	PM/PM ₁₀		voc		СО			
	lb/hr	ton/hr	lb/hr	ton/hr	lb/hr	ton/yr		
Standby Diesel Generator, 635 hp	0.204	0.031	0.448	0.067	3.49	0.524		
Standby Diesel Generator, 700 hp	0.276	0.041	0.494	0.074	3.85	0.578		

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible fractions.

(b) In order to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration), each manufacturing line shall comply with the following limitations:

	Pollutant Emission Limitations					
	NO _x SO ₂					
Facility	lb/hr	ton/hr	lb/hr	ton/yr		
Standby Diesel Generator, 635 hp	15.2	2.28	10.3	1.55		
Standby Diesel Generator, 700 hp	16.8	2.52	11.3	1.70		

D.6.2 Production Limitations

The annual fuel usage from the standby generators determined on a twelve (12) consecutive month period, shall be limited as follows to demonstrate compliance with the annual emission limitations required by Operation Condition D.6.1:

Facility	Annual Fuel Usage Limitations, gallons / 12 consecutive month period
Standby Diesel Generator, 635 hp	7,800
Standby Diesel Generator, 700 hp	10,500

Reason not incorporated: These permit conditions were not incorporated because these generators were never installed.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 13, 1996. There was no notice of completeness letter mailed to the source.

Emission Calculations

The emission calculations contain confidential information regarding the raw material input and process design. Therefore, this information has not been included for public review. The OAQ has reviewed and accepted the emission calculations and the appropriate emission limitations have been provided in the permit conditions.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential to Emit (tons/year)
Particulate Matter (PM)	greater than 250
Particulate Matter (PM ₁₀)	greater than 250
Sulfur Dioxide (SO ₂)	less than 100
Volatile Organic Compounds (VOC)	greater than 100 and less than 250
Carbon Monoxide (CO)	greater than 250
Nitrogen Oxides (NO _x)	greater than 250
Lead (Pb)	less than 10
Single Hazardous Air Pollutant (HAP) (formaldehyde and phenol)	greater than 10
Combination of HAPs	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, VOC, CO and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and emission offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	34
PM-10	34
SO ₂	16
VOC	9
CO	14
NO,	59

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

		Potential to Emit (tons/year)					
Process/facility	PM	PM-10	SO ₂	voc	со	NO _x	HAPs
rail car unloading station and 11 raw material storage silos	0.03 g/dscf						
S5 line 2 melt furnace		0.2 lb/hr	0.38 lb per ton of glass pulled	0.85 lb per ton of glass pulled	3.41 lb/hr		
S5 line 3 melt furnace	7.8	7.8	0.2 lb/hr	0.38 lb per ton of glass pulled	0.85 lb per ton of glass pulled	3.41 lb/hr	
S7 line 6 melter	3.9	3.9	0.11	0.38 lb per ton of glass pulled	0.85 lb per ton of glass pulled	0.08 lb/hr	
S2 line 2 forming- unbonded product	58.3	58.3		6.78 lb/hr	21 lb/hr	2.03 lb/hr	
S3 line 3 forming- unbonded product	123.6	123.6 123.6		6.78 lb/hr	21 lb/hr	2.03 lb/hr	10 tons per year single HAP; 25 tons
S3 Line 3 forming- bonded product				18 lb/hr	21.0 lb/hr	2.03 lb/hr	per year combined HAP
S2 line 6 forming- unbonded product	45.4	45.4		3.77 lb/hr	25.3 lb/hr	2.18 lb/hr	

		Potential to Emit (tons/year)					
Process/facility	PM	PM-10	SO ₂	voc	СО	NO _x	HAPs
S2 line 6 forming-bonded product				8.66 lb/hr	25.3 lb/hr	2.18 lb/hr	less than 10 tons per
S2 line 6 Curing	6.2	6.2		1.5 lb/hr	1.22 lb/hr	0.84 lb/hr	year single HAP; less than 25 tons per year combined HAP
S2 line 6 Cooling Process	0.29 lb per ton of glass pulled	0.29 lb per ton of glass pulled		0.4 lb/hr	0.39 lb/hr	0.25 lb/hr	
S85 shredding/package	0.26 lb/ton glass pulled	0.26 lb/ton glass pulled					
S86 shredding/package	0.26 lb/ton glass pulled	0.26 lb/ton glass pulled					
S12 shredding/package	0.29 lb/ton glass pulled	0.29 lb/ton glass pulled					
S13 shredding/package	0.57 lb/ton glass pulled	0.57 lb/ton glass pulled					
S11 shredding/package	0.65 lb/ton glass pulled	0.65 lb/ton glass pulled					
S34 EP dust recycling system	0.19 lb/hr	0.19 lb/hr					
S10 cold end housekeeping system	0.51 lb/hr	0.51 lb/hr					
S4 natural gas-fired boiler	0.34 lb/hr	0.34 lb/hr	0.015 lb/hr	0.07 lb/hr	0.88 lb/hr	3.5 lb/hr	

County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Maintenance
NO ₂	Attainment
Ozone	Attainment

Pollutant	Status
СО	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Wayne County has been classified as attainment or unclassifiable for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

40 CFR 60, Subpart CC (New Source Performance Standard (NSPS) for Glass Manufacturing Plants)
This regulation applies to glass furnaces constructed or modified after June 15, 1979 and
produce more than 4,550 kilograms of glass per day. A glass furnace is defined as "a unit
comprising a refractory vessel in which raw materials are charged, melted at high temperature,
refined, and conditioned to produce molten glass. The unit includes foundations, superstructure
and retaining walls, raw material charger systems, heat exchangers, melter cooling system,
exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral
control systems and instrumentation, and appendage for conditioning and distributing molten
glass to forming apparatuses. The forming apparatuses, including the float bath used in flat
glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing
are not considered part of the glass melting furnace."

Johns Manville originally constructed the gas-fired glass melting furnaces on lines 2 and 3 prior to June 15, 1979 and the furnaces have been modified as described in CP-177-5873-00006. Therefore, the gas-fired furnaces are subject to this regulation. Line 6 has an electric melter instead of a gas-fired furnace, therefore Subpart CC does not apply to line 6.

Although the glass furnaces are considered "modified-processes" as defined in the rule because they are "oxygen fired" units, the source has chosen to meet the general standards in Section 60.292. These standards require that a furnace producing wood fiberglass be limited to 0.25 grams of PM per kilogram of glass produced (0.5 pound per ton). There are no specific monitoring recordkeeping and reporting requirements in the NSPS. This limit is greater than the PSD limit applicable to these furnaces. Therefore, compliance with the PSD limit will ensure compliance with this limit.

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- 40 CFR 60, Subpart Dc (Small Industrial/Commercial/Institutional Steam Generating Units)
 S4 boiler is not subject to the requirements of 40 CFR 60, Subpart Dc due to the construction date of 1961.
- 40 CFR 60, Subpart PPP (NSPS for Wool Fiberglass Insulation Manufacturing Plants)
 This regulation applies to wool fiberglass insulation manufacturing lines which are comprised of forming sections, curing sections, and cooling sections. According to this regulation, each manufacturing line shall not exceed 11.0 pounds of particulate matter per ton of glass pulled. The manufacturing lines are in compliance with this rule because the BACT analysis conducted as specified in 326 IAC 2-2 requires a more stringent PM emission rate. The compliance monitoring, recordkeeping and reporting requirements included in the regulation apply only to facilities that use a wet scrubbing control device or an electrostatic precipitator to comply with the standard. Neither of these control devices are used on the applicable manufacturing lines. Therefore, there are no monitoring, recordkeeping, or recording requirements that apply to this
- 40 CFR 63, Subpart NNN (National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing)

This regulation does not apply to the source because the source is not a major source of hazardous air pollutants due to a limit on the emissions of hazardous air pollutants. The source has taken limits on the production of bonded product on Line 6 (the only line that produces bonded product) in order to limit HAP to less than 10 tons per year of a single HAP and to less than 25 tons per year of a combination of HAP. The other process lines do not emit HAP.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

source under this regulation.

The source has submitted a Preventive Maintenance Plan (PMP) on December 13,1996.

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on December 13, 1996.

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is a major Prevention of Significant Deterioration (PSD) source. PSD limits for individual facilities are listed under the section titled "State Rule Applicability - Individual Facilities".

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM_{10} , VOC, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

This major PSD source is a glass fiber processing plant, and therefore, one of the 28 source categories with a major source threshold of one hundred (100) tons per year for any pollutant subject to regulation under the Clean Air Act. A previous modification of Lines 2, 3, and 6 manufacturing lines (forming, curing, and cooling processes) was subject to the Prevention of Significant Deterioration (PSD) rules for PM, PM₁₀, VOC, and CO because the emissions from these pollutants were above the PSD significant threshold levels. Therefore, the source is subject to several requirements due to the BACT analysis. These limits are as follows:

- (a) Pursuant to 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), from the raw material handling, storage and batching facilities for lines 2, 3, and 6 shall comply with the following limitations:
 - (1) The unloading station shall be equipped with a bootlift device and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
 - (2) The raw material conveyor system shall be enclosed and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
 - (3) The raw material batch silos and day bins shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.
- (b) Each melt furnace shall comply with the following limitations:

	Pollutant Emission Limitations, lb/ton of glass pulled		
Facility	PM/PM ₁₀	VOC	СО
Line 2 Melt Furnace	0.25	0.38	0.85
Line 3 Melt Furnace	0.25	0.38	0.85
Line 6 Melter	0.45	0.38	0.85

PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same and shall be measured as the sum of the filterable and condensible fractions.

	PM/PM₁₀ Emission Limitations	
Facility	tons/yr	gr/dscf
Line 2 Melt Furnace	7.0	0.01
Line 3 Melt Furnace	7.8	0.01
Line 6 Melter	3.9	0.02

(1) Line 2 Melt Furnace shall not exceed a glass production rate of 7,200 pounds per hour;

- (2) Line 3 Melt Furnace shall not exceed a glass production rate of 7,200 pounds per hour; and
- (3) Line 6 Melter shall not exceed a glass production rate of 4,000 pounds per hour.
- (c) Each manufacturing line shall comply with the following limitations:
 - (1) Unbonded Product Limitations

	Pollutant Limitations			
Facility	PM/PM ₁₀ (lb/ton VOC CO glass pulled) (lbs/hr) (lbs/hr)			
Line 2 Forming Process	3.70	6.78	21.0	
Line 3 Forming Process	3.70	6.78	21.0	
Line 6 Forming Process	3.70	3.77	25.3	

(2) Bonded Product Limitations

	Pollutant Limitations			
Facility	PM/PM ₁₀ (lb/ton VOC CO glass pulled) (lbs/hr) (lbs/hr)			
Line 6 Cooling Process	0.29	0.40	0.39	
Line 6 Forming Process	7.84	8.66	25.3	
Line 6 Curing Process	1.99	1.50	1.22	

PM/PM₁₀ means that the PM limit and the PM₁₀ limit are the same and shall be measured as the sum of the filterable and condensible fractions. The particulate matter emissions established above demonstrate compliance with 40 CFR 60, Subpart PPP (New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants).

- (3) Pursuant to 326 IAC 2-2-3(a)(3), the forming, curing, and cooling processes shall comply with the following limitations:
 - (A) Line 2 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour;
 - (B) Line 3 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour; and
 - (C) Line 6 Forming, Curing and Cooling Process shall not exceed a combined glass production rate of bonded and unbonded product of 4,000 pounds per hour.
- (d) Each shredding and packaging area shall comply with the following limitations:

Facility	Facility Stack	PM/PM10 Emission Limitations, lb/ton glass pulled
Line 2 Shredding and Packaging	S85	0.26
Line 2 Shredding and Packaging	S86	0.26

Facility	Facility Stack	PM/PM10 Emission Limitations, lb/ton glass pulled
Line 3 Shredding and Packaging	S12	0.29
Line 3 Shredding and Packaging	S13	0.57
Line 6 Shredding and Packaging	S11	0.65

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible fractions.

- (1) The shredding and packaging processes shall comply with the following limitations:
 - (A) Line 2 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour;
 - (B) Line 3 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour; and
 - (C) Line 6 Shredding and Packaging Process shall not exceed a glass production rate of 4,000 pounds per hour.
- (e) The ancillary equipment shall comply with the following particulate matter limitations:
 - (1) The particulate emissions from stack S34 from the EP recycling system shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
 - (2) The cold end housekeeping system shall be equipped with a baghouse system and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
 - (3) The ancillary equipment shall also comply with the following limitations:

	Pollutant Limitations, lbs/hr		
Facility	PM/PM ₁₀	voc	СО
EP Dust Recycling System	0.19	0	0
Cold End Housekeeping System	0.51	0	0
Natural Gas-fired Boiler	0.34	0.07	0.875

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible factions.

 PM/PM_{10} means that the PM limit and the PM_{10} limit are the same and shall be measured as the sum of the filterable and condensible fractions.

(f) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration), not applicable for NO_X and SO₂ the source shall comply with the following limitations:

	Pollutant Emission Limitations			ons
	N	NO _x		02
Facility	lb/hr	ton/yr	lb/hr	ton/yr
Line 2 Melt Furnace	3.41		0.20	
Line 3 Melt Furnace	3.41		0.20	
Line 6 Melter	0.08		0.11	
Line 2 Forming Process	2.03		0	
Line 3 Forming Process	2.03		0	
Line 6 Cooling Process	0.25		0	
Line 6 Forming Process	2.18		0	
Line 6 Curing Process	0.84		0	
EP Dust Recycling Fan	0		0	
Cold End Housekeeping System	0		0	
Natural Gas-fired Boiler	3.5		0.015	

326 IAC 8-1-6 (VOC Emission Limitations)

Johns Manville has satisfied the requirements of 326 IAC 8-1-6 because it is subject to the more restrictive PSD BACT requirements for VOC pursuant to 326 IAC 2-2.

326 IAC 11-4 (Fiberglass Insulation Manufacturing)

Johns Manville is not subject to the requirements of this rule because these requirements apply only to facilities located in Shelby County that produce fiberglass insulation by the superfine (flame blown) process existing on June 19, 1979.

326 IAC 6-3-2 (Particulate Matter Emissions Limitations From Process Operations)

According to this rule, if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6-1 (Nonattainment Area Particulate Limitations), then the limitation contained in this rule (326 IAC 6-3) shall not apply. Therefore, this rule does not apply to this source, which is limited according to 326 IAC 6-1.

326 IAC 6-1-2 (Particulate Emission Limitations for General Sources)

The following facilities are not subject to this site-specific provisions of 326 IAC 6-1-14, and therefore, are subject to the provisions of 326 IAC 6-1-2(a) for General Sources. This rule states that applicable facilities shall not discharge gases containing particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

S21 Raw Material Storage Silo

S22 Raw Material Storage Silo

S23 Raw Material Storage Silo

S24 Raw Material Storage Silo

S25 Raw Material Storage Silo

S26 Raw Material Storage Silo

S27 Raw Material Storage Silo

S28 Raw Material Storage Silo

S31 Raw Material Day Bin 2N

S32 Raw Material Day Bin 3W

S33 Raw Material Day Bin 3E

S85 Line 2, Shredding and Packaging

S86 Line 2, Shredding and Packaging

S12 Line 3, Shredding and Packaging

S13 Line 3, Shredding and Packaging

S11 Line 6, Shredding and Packaging

S34 EP Dust Recycling System

S10 Cold End Housekeeping

Railcar Unloading Station

Trimmers that do not produce fugitive emissions and are equipped with a dust-collector or trim material recovery device such as a bag filter or cyclone 635 HP and 700 HP diesel generators

326 IAC 2-4.1 (New Source Toxic Control Rule)

Because of a recent modification (CP-177-5873-00006) the manufacturing lines 2, 3, and 6 are limited to less than 10 tons per year of any single HAP and 25 tons per year of a combination of HAPs. This limit renders 326 IAC 2-4.1 not applicable.

326 IAC 6-1-14 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-14 (Nonattainment Area Particulate Limitations), the following particulate matter (PM) emission limitations apply in Wayne County for Johns Manville International, Inc.

Unit/Stack	Description	Limitation (ton/yr)
S5	Line 2 and 3 Melt Furnace	7.8 (0.01 grain/dscf)
S 7	Line 6 Electric Melter	3.9 (0.02 grain/dscf)
S2	Line 2 Forming	58.3 (0.02 grain/dscf)
S 3	Line 3 Forming	123.6 (0.02 grain/dscf)
S2	Line 6 Forming	45.4 (0.02 grain/dscf)
S2	Line 6 Curing	6.2 (0.02 grain/dscf)
S4	Boiler	1.5 (0.0137 lb/MMBTU)

In order to meet these limits the production of product from each line shall be limited as follows:

Facility	Combined Bonded and Unbonded Glass Production Limitation, tons/yr
Line 2 Forming Process	31,536
Line 3 Forming Process	31,536
Line 6 Forming Process	17,520

Also, the production of bonded product from Line 6 shall be limited to 6,240 tons per year, rolled on a monthly basis.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions), 326 IAC 6-4-2(4) is not federally enforceable.

326 IAC 7-4-4 (Wayne County Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-4-4, the following sulfur dioxide emission limitations apply in Wayne County for Johns Manville International, Inc.

Unit	Description	Limitation
S4	Boiler	1.6 lb/MMBTU
S5	Line 2 and 3 Melt Furnace	9 lb/ton

326 IAC 8-3-2 (Cold Cleaner Operations)

The applicator cleaning operations are subject to the requirements of 326 IAC 8-3-2. This rule requires that the cleaner be equipped with a cover and a facility for draining cleaned parts as well as that waste solvent be stored only in covered containers.

326 IAC 8-3-2 (Cold Cleaner Operation and Control)

The applicator cleaning operation is subject to the requirements of 326 IAC 8-3-5(a). This rule requires that the owner and operator of a cold cleaner degreaser facility shall ensure that the degreaser is equipped with a cover that must be designed so that it can be easily operated with one (1) hand if certain conditions exist. The degreaser must be equipped with a facility for draining cleaned articles.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) Once per shift, visible emissions notations of the stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

- (b) The Permittee shall record the total static pressure drop across the baghouses and fabric filters at least once per shift. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses and fabric filters shall be maintained within the range of 1.0 to 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) The Permittee shall maintain the field voltages of the ESP at a minimum level of 20 kilovolts or a minimum level determined from a compliant stack test. At least once per shift the Permittee shall monitor and record the primary voltage and amperage of the T-R sets and the voltages and amperages of the three (3) fields. The Compliance Response Plan for the ESP shall contain troubleshooting contingency and response steps for the ESP when the voltage of the T-R set drops five (5) direct current kilovolts below the predetermined baseline or if less than 90% of the total T-R sets are functioning.

These monitoring conditions are necessary because the baghouses fabric filters and ESP for the melting processes must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 6-1 (Nonattainment Area Particulate Limitations), 326 IAC 6-3 (Process Operations), 326 IAC 2-7 (Part 70), and 40 CFR 60, Subpart PPP (New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the 1990 Clean Air Act. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those which constitute a major source according to Section 112 of the 1990 Clean Air Act.
- (b) Air toxic calculations are not attached because the emission calculations contain confidential information.

Conclusion

The operation of this fiberglass insulation manufacturing plan shall be subject to the conditions of the attached proposed Part 70 Permit No. T177-7720-00006.